

CLAIMS

1. A rear projection screen comprising a lens sheet having an optical function of condensing or diffusing light, wherein the lens sheet has two or more diffusing parts separately provided in a light-transmitting direction.
2. The rear projection screen according to claim 1, wherein one of the two or more diffusing parts is provided on a light-entering-side surface of the lens sheet, and another one of the diffusing parts is provided on a light-emerging-side surface of the lens sheet.
3. The rear projection screen according to claim 1, wherein the two or more diffusing parts are provided on a surface of the lens sheet and inside the same.
4. The rear projection screen according to claim 1, wherein any two of the two or more diffusing parts are such that a light-source-side diffusing part has a diffusing power lower than that of an observation-side diffusing part.
5. The rear projection screen according to claim 1, wherein any two of the two or more diffusing parts are such that a light-source-side diffusing part is formed by incorporating first diffusive fine particles into a first base material, that an observation-side diffusing part is formed by incorporating second diffusive fine particles into a second base material, and that a difference between a refractive index of the first diffusive fine particles and that of the first base material is smaller than a difference between a refractive index of the second diffusive fine particles and that of the second base material.
6. The rear projection screen according to claim 5, wherein the second diffusive fine particles have an average particle diameter not greater than 15 micrometers.
7. A rear projection screen comprising two or more lens sheets or optical sheets having an optical function of condensing or diffusing light, wherein

at least one of the two or more lens sheets or optical sheets has at least one diffusing part, and

the two or more lens sheets or optical sheets have, as a whole, two or more diffusing parts.

6. ⁵ The rear projection screen according to claim 7, wherein the diffusing parts are provided on surfaces of the two or more lens sheets or optical sheets, or inside the same.

7. ⁵ The rear projection screen according to claim 7, wherein the diffusing part of the outermost lens sheet or optical sheet on a light source side is provided on a light-entering-side surface of this lens sheet or optical sheet, and the diffusing part of the outermost lens sheet or optical sheet on an observation side is provided on a light-emerging-side surface of this lens sheet or optical sheet.

10. The rear projection screen according to claim 7, wherein any two of the two or more diffusing parts are such that a light-source-side diffusing part has a diffusing power lower than that of an observation-side diffusing part.

11. The rear projection screen according to claim 7, wherein any two of the two or more diffusing parts are such that a light-source-side diffusing part is formed by incorporating first diffusive fine particles into a first base material, that an observation-side diffusing part is formed by incorporating second diffusive fine particles into a second base material, and that a difference between a refractive index of the first diffusive fine particles and that of the first base material is smaller than a difference between a refractive index of the second diffusive fine particles and that of the second base material.

12. The rear projection screen according to claim 11, wherein the second diffusive fine particles have an average particle diameter not greater than 15 micrometers.

Sakai 3